October 17, 2004

Re: Winter format

Dear Badger Weather Net member;

This letter will serve to refresh you on what is expected when you give your reports.

The winter format consists of the following, in this order:

A message number followed by this information:

1. 24 hour high temperature (rounded to nearest degree)
2. 24 hour low temperature (rounded to nearest degree)
3. 24 hour ***precipitation*** (to nearest hundredth [.01] of inch)
4. 24 hour new snow fall (to nearest tenth [0.1] of inch)
5. Total snow fall on the ground (to nearest inch- if less than 0.5 report a ***zero***)
6. On Monday, total ***precipitation*** for the week (to nearest hundredth [.01] of inch)

I wish to emphasize that ***precipitation*** is the ***melted water equivalent*** of **anything** that falls from the clouds. This is rain, snow, sleet, hail. Column 3 and 6 are not just for rain!! If you report any new snow, column 3 must have something besides "zero". If ***precipitation*** is unknown, just say-- "missing".

Water equivalent is measured in a calibrated cylinder such as the all weather rain gauge available at: http://www.storesonline.com/site/453784 This instrument requires one to melt the snow, sleet or hail to get the ***melted water equivalent.**** *(see bottom of this memo)* Or, the infamous K9JPS coffee can scale can read the water equivalent direct.

If you don't have any precipitation, then just report it as zero. If not measured, report it as missing or "X-ray". "Trace" of precipitation is still accepted. "Trace" of new snow is a "Trace" of precipitation. Trace is not used when reporting snowfall on the ground (#5)- that is, less than half an inch is considered zero.

When measuring snow depth, it is advisable to take several readings around your lot and average them. Take measurements out in the open; away from fences and trees. Use a *white* board out in an open area as your collection spot for a snow "cookie cut" sample for measurement of water equivalent.

Another helpful tip is to report all numbers separately. For example, a temperature of 50 degrees should be reported as " Five Zero degrees". You may add "fifty" afterwards, for clarity, but don't just give "fifty degrees". It can be confusing to the pickup station because *fifty* can sound like *sixty* under some propagation situations. There are plenty of other such examples. We want to be sure we are reporting what you want us to give!

I hope this letter helps clear up some of the confusion of reporting weather in the winter. We really appreciate your participation in the BWN because it provides valuable data to the National Weather Service. This data is used by them for numerous hydrological, meteorological, and climatological studies and is directly incorporated into computer models used in daily forecasting.

If you have any questions, please feel free to ask.

Looking forward to your daily reports!

73,

Don
W9IXG

* An easy way to measure the frozen precipitation is to add a measured amount of hot water to the sample and, then, measure the total melted sample for water equivalent. Subtract the amount of hot water you added for the amount of ***precipitation*** you report.